

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
73544 Hwy 64  
Meeker, CO 81641

## ENVIRONMENTAL ASSESSMENT

**NUMBER:** CO-110-2006-139-EA

**CASEFILE/PROJECT NUMBER** (optional):

**PROJECT NAME:** Eureka Pipeline and Storage

**LEGAL DESCRIPTION:** T 3S, R 98 W Sec.16, and 9

**APPLICANT:** USDI- BLM

**ISSUES AND CONCERNS** (optional): None

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**Proposed Action:** The project will be completed in two phases. Phase 1 is to tie into an existing waterline from an alluvial well in Eureka Gulch on the property of the grazing permittee at about 6,900 feet elevation and assuming a 15 foot right of way (ROW), construct approximately 2,950 feet of 11/2 inch HDPE SDR 11 buried pipeline out onto the ridge west of Eureka Gulch. The portion of Phase 1 pipeline that will be built on BLM lands is 2,625 feet (Sec 16, NWNW) (approximately 325 feet on private lands). This phase will be completed in mid July of 2006. Phase 2 of the project will be placement of a 2,500 gallon storage tank on the ridge in the NWNW Sec 16 and construction of 8,040 feet of 1 ½ inch pipeline down the side of the existing road to the north line of Section 9 where a stock tank will be placed. Phase 2 of the project will be completed in May and June of 2007. One or more guzzlers for upland bird use will be located from 300- 500 feet from the storage tank.

The pipeline will be buried about one and one half to two feet deep and will have drains and pressure relief valves at appropriate locations. All excavation, trenching, and grading will be done using a backhoe/trackhoe and small D-5 size caterpillar tractor or small caterpillar with a V ditcher attachment. Total pipeline disturbance for phase 1 will be approximately 0.9 acre on BLM lands. Total disturbance for phase 2 including the pipeline, storage and stock tank placement will be approximately 2.8 acres. The work will be completed by the BLM Force Account crew with help from the grazing permittees in late July 2006 and May - June of 2007. All areas of earthen disturbance will be drill or broadcast seeded with Native Seed mixture #3 immediately after recontouring. The section of pipeline going up the hill in the NW1/4 NW ¼ of Section 16 will be water barred and otherwise made impassable for vehicular traffic by

placement of pinyon and juniper braches and trunks. The pipeline adjacent to the road will also have trees placed on it to bar vehicular traffic including 4 wheelers.

**No Action Alternative:** The no-action alternative entails not constructing any of the proposed projects.

### **ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:**

### **NEED FOR THE ACTION:**

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Livestock Grazing P 2-25

Decision Language: Rangeland improvements will be identified in activity plans. Range improvements are necessary to control livestock use and improve rangeland condition.

### **REVIEW OF EXISTING NEPA DOCUMENTS:**

List by name and date all existing NEPA documents that cover the Proposed Action.

Name of Document: Black Sulphur Water Developments; CO-017-97-067-EA; previously addressed the need for additional water sources in order to achieve allotment management objectives and included wells and reservoirs.

Date Approved: 5/29/97

### **AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

## **CRITICAL ELEMENTS**

### **AIR QUALITY**

*Affected Environment:* The entire White River Field Office area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a ten mile radius of any special designation air sheds or non-attainment areas. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM<sub>10</sub>) associated with fugitive dust. In addition, slight increases in the following criteria pollutants: carbon monoxide, ozone (secondary pollutant), nitrogen dioxide, and sulfur dioxide may also occur during pipeline construction due to combustion of fossil fuels. Also, non-criteria pollutants such as visibility, nitric oxide, air toxics (e.g. benzene) and total suspended particulates (TSP) may also experience slight, temporary increases as a result of the proposed action (no national ambient air quality standards have been set for non-criteria pollutants). Unfortunately, no air quality monitoring data is available for the survey area. However, it is apparent that current air quality near the proposed location is good because only one location on the western slope (Grand Junction, CO) is monitoring for criteria pollutants other than PM<sub>10</sub>. Furthermore, the Colorado Air Pollution Control Division (APCD) estimates the maximum PM<sub>10</sub> levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter (µg/m<sup>3</sup>). This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM<sub>10</sub> (24-hour average) of 150 µg/m<sup>3</sup>. In addition, the ridge divide between Eureka Creek and Yankee Gulch has recently (2005) undergone prescribed fire in attempts to establish desired plant communities which given adequate rest from grazing will increase soil stability and improve water quality within the catchment area.

*Environmental Consequences of the Proposed Action:* Implementation of the proposed action may temporarily increase fugitive dust production during pipeline construction. In addition, if burned areas are not allowed adequate rest from grazing, revegetation efforts will fail, increasing soil exposure to eolian processes and elevating the potential for fugitive dust production. However, following adequate rest from grazing in burned areas, development of new water sources will distribute livestock numbers over a greater area, reducing potential for overgrazing, minimizing soil exposure, and lowering potential for fugitive dust production.

*Environmental Consequences of the No Action Alternative:* No additional livestock watering sources will be constructed. Livestock distribution will continue as is. With drought conditions, potential for overgrazing near existing water sources may increase soil exposure potentially elevating fugitive dust production.

*Mitigation:* Reclaim all disturbed surfaces as outlined in the proposed action.

### **CULTURAL RESOURCES**

*Affected Environment:* A Class III pedestrian survey was completed on June 21 for Phase I of the project. No recorded or new cultural resources were found along the surveyed route. A survey of Phase II was completed at this time because the route for Phase II was not flagged.

*Environmental Consequences of the Proposed Action:* Impacts are not anticipated for the completion of Phase I. For Phase II, it is impossible to determine the expected impacts from development since a survey was not completed. If a survey is done before construction of the second phase this would help to minimize the impacts, by accessing the cultural resources and file the necessary paperwork with the State Historic and Preservation Office (SHPO), which is required by law for all projects.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* Phase II cannot be approved until a Class III is completed. For Phase I, the following mitigation measures will be followed during construction, operation, and maintenance of the project:

- All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.
- The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.
- If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

## **INVASIVE, NON-NATIVE SPECIES**

*Affected Environment:* There are no known noxious weeds in the proposed project area. The invasive alien cheatgrass (*Bromus tectorum*) is present in minor amounts primarily in areas of unvegetated soil disturbance associated with roads, gas locations and pipelines.

*Environmental Consequences of the Proposed Action:* The combined projects will create no more than 3.7 acres of earthen disturbance. The actual disturbance will be much likely significantly less than this amount. The areas of earthen disturbance could provide safe sites for the establishment of noxious and invasive species. With prompt revegetation and monitoring,

there is little likelihood that noxious weed or invasive species establishment and proliferation will take place over the short or long term.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation which is an essentially noxious weed free environment.

*Mitigation:* The project area will be monitored on a yearly basis for the occurrence of noxious weeds and/or invasive species. All such species which occur will be eradicated using materials and methods approved in advance by the authorized officer.

## **MIGRATORY BIRDS**

*Affected Environment:* The proposed project would involve a large sagebrush park that is heavily encroached with pinyon and juniper regeneration. In 2002, about 4 miles of this ridgeline were identified as a fuels management project with strong implications for sage-grouse/sagebrush-steppe restoration. Consequently, the most heavily encroached lower quarter of this area was burned in FY2005, with the remaining acreage scheduled for burning in FY2006/07. The southernmost (highest-elevation) water tank, including the storage facility, is proposed to be located in the park's most distal 10% (i.e., lowest elevation). The second tank would be located about 0.75 miles below the park's lowest (most northerly extent) elevation. For purposes of this document, this former sagebrush park is considered to be in an early seral state (i.e., essentially all herbaceous in expression). Although a number of migratory birds of higher conservation interest continue to nest in this encroached sagebrush community (e.g., Brewer's sparrow, green-tailed towhee) from late May through mid-July, the capacity of this area to support nesting activity commensurate with its potential has become increasingly constrained by tree expression. These high density encroachment types are typically represented by habitat generalists (e.g., chipping and vesper sparrow, blue-gray gnatcatcher) and support few species obligate to mature or late seral forms of either component habitat.

*Environmental Consequences of the Proposed Action:* The project area has been and will continue to be significantly modified by a prescribed fire designed to rejuvenate a former sagebrush disclimax. In response to this seral modification, avian communities would be dominated by grassland associates for at least 15 years (e.g., lark and vesper sparrow, western meadowlark). Activity associated with project construction (clearing and trenching) would have very localized influence on nesting birds and would have virtually no effect on birds of higher conservation interest. Species of higher conservation interest would remain unaffected by project-related effects until effective sagebrush canopies began to redevelop, when Brewer's sparrow and green-tailed towhee would increasingly reoccupy the site.

Providing a reliable water source in the burn would increase the intensity of livestock grazing use in proximity to the 2 proposed water sources. Depending on the season and ultimate intensity of livestock grazing use (unspecified use between 1 May to 15 June and 1 November to 28 February), attendant reductions in the height and density of ground cover would reduce the utility of nest habitat for these birds and ultimately reduce potential nest densities and/or recruitment of young into subsequent breeding populations. The proposed upper tank location

(lower margin of sagebrush disclimax) would promote increased use of herbaceous ground cover within at least 0.75 mile of this point, which would involve at least the lower half of the park (about 400 acres). It is anticipated that grazing-related effects would reduce nest densities by up to 50% on the most affected portions of the park, representing a reduction in potential of no more than 25% across the burn. Conversely, this project would be expected to help relieve grazing pressure on other portions of the allotment or allow pasture rotations which may enhance the utility of off-project nest habitat by reducing overall use levels and/or abbreviating the duration of use. This indirect effect would at least partially compensate on-project influences. Considering the extent and abundance of breeding birds associated with this habitat in this portion of Piceance Basin, the overall population effect is expected to be minor.

*Environmental Consequences of the No Action Alternative:* Without the added attraction of a reliable water source, grazing use would have little effective influence on nest habitat utility in the project locale. Conversely, the opportunity to relieve use intensities and/or grazing duration in other portions of the allotment would be foregone.

*Mitigation:* None, but see following section.

#### **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES** (includes a finding on Standard 4)

*Affected Environment:* The proposed project would involve a large sagebrush park that is heavily encroached with pinyon and juniper regeneration. In 2002, about 4 miles of this ridgeline were identified as a fuels management project with strong implications for sage-grouse/sagebrush-steppe restoration. Consequently, the most heavily encroached lower quarter of this area was burned in FY2005, with the remaining acreage scheduled for burning in FY2006/07. The southernmost (highest-elevation) water tank, including the storage facility, is proposed to be located in the park's most distal 10% (i.e., lowest elevation). The second tank would be located about 0.75 miles below the park's lowest (most northerly extent) elevation.

There are no animals listed under the Endangered Species Act that inhabit or derive important benefit from the project locale. The project area either had potential or was formerly occupied by 2 BLM-sensitive animals, the northern goshawk and greater sage-grouse, respectively. About 450 acres of woodlands that were associated with the first burn sequence were surveyed for evidence of woodland raptor nesting activity in 2004. This clearance revealed only 1 red-tailed hawk nest site among these predominantly younger age class stands.

This sage park has probably been unsuitable for substantive use by sage-grouse for a minimum of 20 years. The intent of the remaining burn project is to restore the utility of this former sagebrush-dominated ridgeline for greater sage-grouse nesting and brood-rearing uses (i.e., remove tree regeneration, rejuvenate sagebrush conformation, and enhance ground cover development). It is anticipated that sage-grouse will readily reoccupy this ridgeline from contiguous occupied habitats once sagebrush canopies begin to redevelop, although realizing full nest habitat potential may require 15 or more years. Efforts to better understand acceptable parameters of nest and brood habitat are ongoing, but recent research has focused increasingly on

the role of herbaceous ground cover in providing nest and brood concealment and advantageous microclimatic conditions for hatching. There is mounting evidence that, of habitat-related parameters, sage-grouse nest success and early brood survival are influenced predominantly by the herbaceous understory conditions. In central and southwestern Wyoming, it appears nest sites tend to be selected in areas with higher residual grass cover and grass height, and successful nests tended to have more residual grass cover and grass height than unsuccessful nests. Similarly, the availability of sufficient herbaceous ground cover (in this case, current year's growth) is important for the effective concealment of young sage-grouse chicks, particularly through the first 3 weeks of age (i.e., late July/early August) prior to most being strongly flighted and most vulnerable to predation. In response to numerous and continued public petitions to list the greater sage-grouse as a threatened species, ongoing and future research by State wildlife agencies and academia will likely better define grazing-related effects on sage-grouse, from which effective land use prescriptions can be derived which allow for the development or retention of sufficient ground cover so as not to adversely affect sage-grouse survival or nest success.

*Environmental Consequences of the Proposed Action:* Providing a reliable ridgeline water source, as proposed, would offer opportunities to substantially increase the intensity of growing and dormant season livestock use on at least the northern third (about 200 acres) of the former sagebrush park. Depending on the season and ultimate intensity of livestock grazing use (unspecified use between 1 May to 15 June and 1 November to 28 February), attendant reductions in the height and density of ground cover could reduce the utility of nest and brood habitat for these birds and ultimately reduce potential nest densities and/or recruitment of young into subsequent breeding populations.

A tank and pipeline system offers certain advantages in regulating water availability (compared to earthen ponds) and the system has the potential to offer increased flexibility in moving cattle among other pastures within the allotment that are capable of supporting sage-grouse--allowing advantageous rotations or abbreviated duration of use to maintain adequate vigor and reproduction of native grasses and forbs and at least periodically provide optimum nest and brood cover conditions.

The storage tank and upper water trough are located on the distal 10% of the former sagebrush park and likely within the distal fifth of habitat with long term potential for grouse occupation. Elevated anthropogenic features are generally to be avoided on grouse reproductive habitats since they provide advantageous perches for raptors and corvids that prey on eggs and young grouse. Installing an elevated structure at the lower margin of the park (i.e., T3S R98W section 16 NW1/4NW1/4) offers a lesser perch advantage and, barring movement to the north, is considered a reasonable multiple-use compromise. Further livestock use incentives (e.g., additional waters, location of salt) would be evaluated in the context of sage-grouse nest and brood habitat and may be adjusted with the objective of not adding to progressive reductions in ground cover height and/or density as residual or current year's growth. These future evaluations would be predicated on best available information (e.g., RMP land use prescriptions for grouse nest and brood ranges) or newly developed and accepted habitat thresholds.

*Environmental Consequences of the No Action Alternative:* Under the current grazing regimen and with no reliable sources of water, livestock use on this ridgeline is likely light or light moderate ( $\leq 50\%$ ). After complete implementation of the prescribed burn and significant increases in herbaceous expression, grazing use would be expected to be substantially less. This alternative would likely offer near-optimal ground cover conditions for nesting and brooding grouse in the long term.

*Mitigation:* The proposed storage tank should not be placed any further south and/or west than the northwest quarter of section 16, T3S R98W.

Further livestock use incentives any further south and/or west than the northwest quarter of section 16, T3S R98W (e.g., additional waters, location of salt) would be evaluated in the context of sage-grouse nest and brood habitat and may be adjusted with the objective of not adding to reductions in ground cover height and/or density as residual or current year's growth. These future evaluations would be predicated on best available information (e.g., RMP land use prescriptions for grouse nest and brood ranges) or newly developed and accepted habitat thresholds.

*Finding on the Public Land Health Standard for Threatened & Endangered species:* The current state of the project area marginally meets the land health standards in regard to species obligate to this sage-steppe community. As a former sage-steppe fire-induced disclimax, the park represents a community that has achieved or exceeded the upper end of its successional series. Anticipated use of fire (not directly associated with this proposed action) was intended to restore a sage-steppe sere in the long term and prompt rejuvenation of native understory components. The proposed action, by enhancing livestock use of this ridgeline community, would result in progressive declines in ground cover height and density during both the dormant season (as residual cover for the subsequent nesting season) and the growing season (synchronous with the sage-grouse nesting and early brood-rearing periods). This alternative may detract from optimal habitat function (as gained through the no-action alternative), but specific grazing prescriptions (timing, duration, and intensity of use) would determine the ultimate influence on effective nest and brood cover properties in the long term. The land health standards applicable to special status species provide a number of indicators (objectives) that address the maintenance or development of habitat conditions sufficient for the recovery of at-risk species, and it is anticipated that appropriate consideration of these objectives will guide grazing use such that the land health standards are met.

## **WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents,



they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation:* The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

## **WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)**

*Affected Environment: Surface Water:* The proposed action is situated in the Lower Piceance Creek watershed near Rio Blanco, CO (5<sup>th</sup> level watershed). Sub-catchments affected by the proposed actions are: Yankee Gulch, Eureka Creek, and Black Sulphur Creek. The proposed pipeline starts in Eureka Creek, proceeds up to the ridge (drainage divide) between Eureka Creek and Yankee Gulch which it follows to the proposed stock tank in the northwest quarter of section 16. The proposed stock tank in section 16 sits on the drainage divide between Eureka Creek, Yankee Gulch, and Black Sulphur Creek. The drainage divide between Eureka Creek and Yankee Gulch has recently (2005) undergone prescribed fire in attempts to establish desired plant communities which given adequate rest from grazing will increase soil stability and improve water quality within the catchment area.

Eureka Creek is an intermittent stream, its lower reaches flow primarily in response to spring runoff and high intensity precipitation events. Yankee Gulch is an ephemeral system which only flows in direct response to spring runoff and high intensity precipitation events. Both Eureka Creek and Yankee Gulch are tributaries to Black Sulphur Creek which is a perennial tributary to Piceance Creek. Piceance Creek is a tributary to the White River which is a tributary to the Green River in Utah (tributary to the Colorado River).

The “Status of Water Quality in Colorado – 2004” plus the 2006 update (CDPHE, 2006b) were reviewed for information related to the proposed recreation area. The proposed action is located entirely within stream segment 20 of the White River Basin. Stream segment 20 has not been classified as use protected. An intermediate level of water quality protection applies to waters that have not been designated outstanding waters or use-protected waters. For these waters, no degradation is allowed unless deemed appropriate following an antidegradation review. Segment 20 has been designated by the state as being beneficial for the following uses: Cold Aquatic Life 1, Recreation 2, and Agriculture. For stream segment 20, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 6.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 6000/100 ml, and 630/100 ml E. coli. (CDPHE, 2006b).

Newly promulgated Colorado Regulations Nos. 93 and 94 (CDPHE, 2006c and 2006d, respectively) were also reviewed for information related to the proposed project area drainages. Regulation No. 93 is the State’s list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2006 list of segments needing development of TMDLs includes two

segments within the White River - segment 9b, White River tributaries North & South Forks to Piceance Creek, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development) and segment 22, tributaries to the White River, Douglas Creek to the Colorado/Utah boarder, specifically West Evacuation Wash, and Douglas Creek (sediment impairments). Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes two White River segments that are potentially impaired – 9 and 22. Stream segment 20 has not been identified on the 303(d) or M&E List.

Ground Water: The proposed action would transport water from an alluvial well situated on private surface in the Eureka Creek Drainage. Alluvium is composed of quaternary aged stream deposits (sands, gravels, and clays) found adjacent to stream channels in drainage bottoms. Alluvial aquifers are recharged primarily by infiltration of surface water (precipitation and runoff), and to a lesser extent by deeper ground water from bedrock aquifers. No BLM springs or water wells have been identified hydro-geologically down gradient of the alluvial well on private land. However, BLM perennial spring 173-04 is located in the NW SE NW quarter of section 17. Data for this spring is unavailable and an onsite evaluation of the condition of this spring will be necessary prior to implementation of the proposed actions.

*Environmental Consequences of the Proposed Action:* Given the close proximity to the recent prescribed burn, encouraging cattle use in this area prematurely could effectively negate all potential benefits from the recent prescribed burn. Restoring desired vegetative communities essential for stabilizing soils, improving/maintaining water quality, and providing forage for livestock/wildlife will not be possible if livestock are allowed to graze the burned area prematurely. Installation of watering tanks and the pipeline may alter natural drainage patterns resulting in accelerated erosion and decreased water quality to down stream portions of the drainage basin. However, if burned areas are allowed appropriate rest from grazing, implementation of the proposed action would result in wider distribution of livestock which would be beneficial to watershed health.

The BLM is required to comply with all local, state, and federal water quality regulations. Under Phase II Stormwater Regulations, the Colorado Department of Public Health and Environment (CDPHE) has required National Pollution Discharge Elimination System (NPDES) permit coverage for stormwater discharges from construction activities that disturb between one and five acres. Since the first phase is less than 1 acre a permit is not required. For phase II, The BLM will obtain a general phase II permit with the EPA and have its CDPHE approved Stormwater Pollution Prevention Plan (SWPPP) on file at the WRFO.

*Environmental Consequences of the No Action Alternative:* During dry periods, livestock tend to congregate near water sources reducing the health and vigor of surrounding vegetative communities. In these areas, soils would likely be exposed to erosional processes which could deteriorate water quality and stream channel/bank morphologic conditions in the affected watershed. Under the no action alternative, livestock distribution would not change from current conditions and the potential for deteriorating vegetative communities and stream channel/bank morphologic conditions will be elevated.

*Mitigation:* For phase II, The BLM will obtain a general phase II permit with the EPA and have its CDPHE approved Stormwater Pollution Prevention Plan (SWPPP) on file at the WRFO.

It is recommended that an evaluation of BLM Spring 173-04 be done prior to implementation of the proposed action to assess its potential as a wildlife/livestock water source. If BLM Spring 173-04 is identified as an inadequate source of water, construction of the proposed watering tanks and pipeline will follow construction/reclamation procedures outlined in the proposed action; however if it is adequate, then additional mitigation may be required to keep livestock from over using the area.

In order to maintain/improve water quality in the affected catchment areas, the burned area along the drainage divide must be deferred from all livestock grazing until successful revegetation is observed by the BLM ID team.

*Finding on the Public Land Health Standard for water quality:* Stream segment 20 of the White River Basin currently meets water quality standards set by the state. However, many of the upper tributaries which are ephemeral and flow in direct response to storm events do not meet standards during periods of flow. By following *all* suggested mitigation measures, water quality in the affected stream segment should be unaffected by the proposed action and continue to meet standards.

#### **CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No ACEC's, flood plains, aquatic habitats, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species and aquatic habitats, the Public Land Health Standards are not applicable since neither the proposed nor the no-action alternative would have any influence on aquatic communities or populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

#### **NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

##### **SOILS (includes a finding on Standard 1)**

*Affected Environment:* Soils at the site of the proposed action are primarily in the Rentsac channery loam, Redcreek- Rentsac complex and the Piceance fine sandy loam map units. The associated ecological site for the Rentsac and Redcreek- Rentsac complexes is pinyon- juniper woodland. The associated ecological site for the Piceance Fine Sandy Loam unit is the rolling loam ecological site. The Rentsac and Redcreek- Rentsac soils tend to be

shallow, well-drained with moderate erosion potential and have been formed in residuum from sandstone parent material. The Piceance Fine Sandy Loam soils are located on the ridgetop and are moderately deep, well- drained with moderate erosion potential and are formed from eolian material and colluvium derived from sandstone.

*Environmental Consequences of the Proposed Action:* The proposed action could potentially create about 3.7 acres of earthen disturbance. The primary negative impact that could occur would be if no revegetation was to take place and cheatgrass and/or noxious weeds invade the site. With the proposed mitigation, this is unlikely to occur. The watershed and allotment wide impact on soils and their properties would be beneficial due primarily to improved patterns of livestock distribution and its consequent positive impact on plant cover, productivity and thus, soil productivity and function.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* All disturbed areas will be promptly recontoured and revegetated with Native seed mix #3 listed in the Vegetation section below.

*Finding on the Public Land Health Standard for upland soils:* Soils in the project area currently meet the Standard and are expected to meet the Standard in the future following implementation of the proposed action.

## **VEGETATION (includes a finding on Standard 3)**

*Affected Environment:* Vegetation in the project area is dominated by pinyon- juniper woodland. These woodlands are primarily mid and older aged stands. On the ridgetop, pinyon has invaded Wyoming big sagebrush parks (rolling loam ecological site ) and these sites are in transition from a stage one to a stage two invasion process.

*Environmental Consequences of the Proposed Action:* The proposed action will disturb /destroy some of the existing vegetation on the project site. The vegetation destroyed will be principally be pinyon – juniper and Wyoming big sagebrush. With the proposed mitigation, the net effect of the disturbance will be to improve the plant cover and composition on the early seral sites and maintain or improve the plant cover and composition on the mid seral sites that are actually disturbed by construction. On an ecological site wide and watershed and allotment basis, the proposed action will generally improve potential to meet the Standard on all ecological sites except those early seral sites previously identified as having crossed the threshold of plant community change.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* All disturbed areas will be promptly recontoured and revegetated with Native seed mix #3 listed in the table below.

| Native Seed Mix # 3 |                                 |   |   |
|---------------------|---------------------------------|---|---|
| 3                   | Western wheatgrass (Rosanna)    | 2 | Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany) |
|                     | Bluebunch wheatgrass ( Whitmar) | 2 |   |
|                     | Thickspike wheatgrass (Critana) | 1 |   |
|                     | Indian ricegrass (Rimrock)      | 2 |   |
|                     | Fourwing saltbush (Wytana)      | 1 |   |
|                     | Utah sweetvetch                 | 1 |   |

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Upland plant communities in the project area currently meet the Standard. Successful implementation of this project will enable us to exceed the Standard in the future.

### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* The project area is encompassed by higher elevation winter ranges of deer and elk which typically sustain greatest use from September through January and again in April and May. Although deer make substantial use of the area's shrub complex as a winter forage base, the availability and perhaps dietary quality of the sagebrush is in decline with increasing successional advance of the community (e.g., increasing tree component). Similarly, fall through spring elk use (as well as spring and fall deer use) is contingent primarily on grass stocks, the availability of which is in quickening regression as conifer cover increases.

While raptors may opportunistically forage throughout the area, the project area had little former and has effectively no current utility (i.e., burned) for woodland raptor nest functions. Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized avian (see Migratory Birds above) or mammalian species known to inhabit those lands potentially influenced by this action.

*Environmental Consequences of the Proposed Action:* The current composition and abundance of vegetation provides an acceptable seasonal forage base for big game. The expected increase in cattle use of this ridgeline community is not expected to compromise the quality or quantity of herbaceous forage available for seasonal big game use. Winter use, by removing previous year's growth and exposing bunchgrass crowns, would likely increase the accessibility of fresh emerging growth to deer in spring on an incremental basis. These water sources will undoubtedly be exploited by elk. Elk are capable of making effective use of distant water and it is not considered necessary to further concentrate the number and expand the duration of elk use in this area. Particularly in the interest of sage-grouse habitat restoration (i.e., not adding to the cumulative reduction of herbaceous ground cover), it is recommended that these waters be made unavailable prior to and after the livestock use period.

Similar to the discussion in the Migratory Bird section above, providing a reliable water source in the burn would increase the intensity of livestock grazing use in proximity to the 2 proposed water sources. Depending on the season and ultimate intensity of livestock grazing use

(unspecified use between 1 May to 15 June and 1 November to 28 February), attendant reductions in the height and density of herbaceous vegetation as a cover and forage base would reduce the utility and capacity of reproductive and overwintering habitat for resident small mammals, particularly those that are relegated to habitats with well developed understories (e.g., long-tailed and sagebrush voles). The proposed upper tank location (lower margin of sagebrush disclimax) would promote increased use of herbaceous ground cover within at least 0.75 mile of this point, which would involve at least the lower half of the park (about 400 acres). Conversely, this project would be expected to help relieve grazing pressure on other portions of the allotment or allow pasture rotations which may enhance the utility of off-project nest habitat by reducing overall use levels and/or abbreviating the duration of use. This indirect effect would at least partially compensate on-project influences. Considering the widespread distribution and abundance of nongame species associated with this habitat in this portion of Piceance Basin, the overall population effect is expected to be minor.

*Environmental Consequences of the No Action Alternative:* Maintaining relatively low levels of livestock use on this ridgeline would accommodate objective levels of big game use with wide margins of reserve for population fluctuations or adverse weather conditions. The reduced forage preconditioning of bunchgrass forage for seasonal deer use is not considered a major tradeoff.

Without the added attraction of a reliable water source, grazing use would have little effective influence on forage or cover resources for nongame animals and would likely offer understory conditions that would support the greatest variety and abundance of nongame animals. Conversely, the opportunity to relieve use intensities and/or grazing duration in other portions of the allotment, thereby moderating livestock effects on all but those species most dependent on well developed understories, would be foregone.

*Mitigation:* In the interest of sage-grouse habitat restoration, it is recommended that these waters be made unavailable to big game prior to and after the livestock use period.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): Although the project area is in a state of flux (varying from early to advance successional states), the project area presently meets the public land health standards for terrestrial animal communities. The proposed action is expected to have little effective influence on big game habitat utility and would probably have a somewhat localized inhibitory affect on the utility or function of nongame animal habitat. The overall shrubland communities that will ultimately comprise this landscape are expected to retain sufficient character to support viable populations of resident nongame species. By maintaining relatively low levels of grazing influence on this redeveloping sage-steppe community, the no action alternative would be expected to wholly achieve all the indicators associated with the land health standard.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

| Non-Critical Element      | NA or Not Present | Applicable or Present, No Impact | Applicable & Present and Brought Forward for Analysis |
|---------------------------|-------------------|----------------------------------|---|
| Access and Transportation |                   | X                                |   |
| Cadastral Survey          | X                 |                                  |   |
| Fire Management           |                   | X                                |   |
| Forest Management         | X                 |                                  |   |
| Geology and Minerals      | X                 |                                  |   |
| Hydrology/Water Rights    |                   |                                  | X   |
| Law Enforcement           |                   | X                                |   |
| Noise                     |                   | X                                |   |
| Paleontology              | X                 |                                  |   |
| Rangeland Management      |                   |                                  | X   |
| Realty Authorizations     |                   |                                  | X   |
| Recreation                |                   | X                                |   |
| Socio-Economics           |                   | X                                |   |
| Visual Resources          |                   |                                  | X   |
| Wild Horses               | X                 |                                  |   |

## HYDROLOGY AND WATER RIGHTS

*Affected Environment:* The water source for the proposed pipeline and livestock watering system is from an alluvial well situated on private surface in Eureka Creek. A well permit was granted by the State of Colorado to Tim Mantle (permit # 213558) in 1999 for up to 15 gpm. Use codes associated with the permit are 9-L, which identifies appropriate water usage for livestock and exempts the permit holder from obtaining water rights for up to 15 gpm. As a condition of the water rights exemption, the permit holder can not regulate for or against other water rights holdings affecting or being impacted by permit #213558.

*Environmental Consequences of the Proposed Action:* Pumping from the Eureka Creek alluvium could result in drawdown potentially altering groundwater flow paths and reducing available recharge to Eureka Creek. However, the quantity of water needed for livestock use is not expected to be great enough to significantly alter ground water flow regimes.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* Pipelines and water storage tanks should be inspected regularly for leaks to mitigate unnecessary water depletion from alluvium.

## RANGELAND MANAGEMENT

*Affected Environment:* The Black Sulphur allotment is used by two grazing permittees as follows:

| Allotment Number       | Allotment Permittee | Permit Number | Number of Livestock | Kind of livestock | Period of Use | % Federal Acres | Total Acres | AUMs | LUP Objectives                |
|------------------------|---------------------|---------------|---------------------|-------------------|---------------|-----------------|-------------|------|-------------------------------|
| 06029<br>Black Sulphur | Mantle Ranch        | 051423        | 118                 | C                 | 05/01-06/15   | 86              | 17308       | 153  | 03/25-06/15<br>(1 in 2 years) |
|                        |                     |               | 200                 | C                 | 11/01-02/28   | 86              |             | 679  |                               |
|                        |                     |               | 50                  | C                 | 04/01-06/15   | 86              |             | 107  | 04/20-07/15<br>(1 in 2 years) |
|                        | Boone Vaughn        | 051486        | 100                 | C                 | 05/01-06/15   | 100             |             | 151  |                               |
|                        |                     |               | 100                 | C                 | 11/01-11/30   | 100             |             | 99   |                               |

*Environmental Consequences of the Proposed Action:* All parts of the proposed action will improve livestock distribution by providing dependable water sources during the period of scheduled livestock use. Implementation of the proposed project will allow the grazing permittees to employ a rotational grazing scheme, allowing for deferment of grazing use during the critical growth period every other year.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* All areas of earthen disturbance will be recontoured and revegetated with Native Seed mix #3. The project area will be monitored on a yearly basis for the occurrence of noxious weeds and/or invasive species. All such species which occur will be eradicated using materials and methods approved in advance by the authorized officer.

## REALTY AUTHORIZATIONS

*Affected Environment:* The proposed action is for the construction of a stock water pipeline with storage tanks.

*Environmental Consequences of the Proposed Action:* The proposed action is in an area that is being developed for oil and gas. In the immediate project area, right-of-way COC37755 is natural gas pipeline held by KN Energy Inc. There is a possibility that there are some new facilities in that area that haven't been noted to the plats as of yet. Leaving the storage tank site, Williams has proposed to lay a pipeline coming from the south in order to hook-up a Williams RG 24-20 well into an existing pipeline.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* 1. The Colorado-One-Call procedure will have to be initiated before any surface disturbance can take place in order to locate any known and unknown buried facilities.

2. The water pipeline will be posted with signs that are intervisible to each other. The markers for water pipelines are generally blue and white in color.



3. The storage tanks will be signed with an emergency contact and telephone number of who to contact.
4. The Permittee shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods.
5. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

## **VISUAL RESOURCE**

*Affected Environment:* The proposed action is within a VRM class III area. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape

*Environmental Consequences of the Proposed Action:* The proposed action is small in scale relative to the surrounding landscape; therefore, any modifications will be unseen to the casual observer, and VRM III objectives will be met. Furthermore, any disturbed vegetation will return making the action virtually unnoticeable within a period of a few years.

*Environmental Consequences of the No Action Alternative:* No impact on visual resources.

*Mitigation:* Remove as little vegetation as possible during construction.

**CUMULATIVE IMPACTS SUMMARY:** Development of the proposed action would have the long-term cumulative impact of enhancing riparian expression within the surround drainages as livestock/wildlife use would have a new water source available on the adjacent uplands.

## **REFERENCES CITED:**

- Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division (APCD), 2005. "Colorado Air Quality Data Report – 2004," September 2005.
- CDPHE - Water Quality Control Commission (WQCC), 2004a. Regulation No. 37 Classifications and Numeric Standards for Lower Colorado River Basin. Adopted 1983 and Effective January 20, 2004.

CDPHE-WQCC, 2006b. "Status of Water Quality in Colorado – 2006, The Update to the 2002 and 2004 305(b) Report," April 2006.

CDPHE-WQCC, 2006c. "Regulation No. 93, 2006 Section 303(d) List Water-Quality-Limited Segments Requiring TMDLs," effective April 30.

CDPHE-WQCC, 2006d. "Regulation No. 94, 2006 Colorado's Monitoring and Evaluation List," effective April 30.

**PERSONS / AGENCIES CONSULTED:** None

**INTERDISCIPLINARY REVIEW:**

| <b>Name</b>        | <b>Title</b>                    | <b>Area of Responsibility</b>  |
|--------------------|---------------------------------|--|
| Nate Dieterich     | Hydrologist                     | Air Quality, Water Quality, Surface and Ground; Hydrology and Water Rights                             |
| Tamara Meagley     | Natural Resource Specialist     | Areas of Critical Environmental Concern, Threatened and Endangered Plant Species                       |
| Gabrielle Elliott  | Archeologist                    | Cultural Resources, Paleontological Resources  |
| Mark Hafkenschiel  | Rangeland Management Specialist | Invasive, Non-Native Species, Soils, Wetlands and Riparian Zones, Vegetation, Rangeland Management     |
| Ed Hollowed        | Wildlife Biologist              | Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Wildlife Terrestrial and Aquatic |
| Melissa J. Kindall | Hazmat & Wild Horses Collateral | Wastes, Hazardous or Solid, Wild Horses  |
| Chris Ham          | Outdoor Recreation Planner      | Wilderness, Access and Transportation, Recreation, Visual Resources                                    |
| Ken Holsinger      | Natural Resource Specialist     | Fire Management  |
| Robert Fowler      | Forester                        | Forest Management  |
| Paul Daggett       | Mining Engineer                 | Geology and Minerals   |
| Penny Brown        | Realty Specialist               | Realty Authorizations  |

# **Finding of No Significant Impact/Decision Record (FONSI/DR)**

## **CO-110-2006-139-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION/RATIONALE:** It is my decision to implement Phase I of the Eureka Pipeline and Storage project as described in this environmental assessment with the mitigation listed below. This project will help to achieve the rangeland vegetation management objectives on a watershed, allotment and landscape scale as described in the White River ROD/RMP. It is also my decision to not approve Phase II until the necessary mitigation (mitigation measure 1 and 6 specifically) identified below is carried through.

### **MITIGATION MEASURES:**

1. Phase II cannot be approved until a Class III is completed. For Phase I, the following mitigation measures will be followed during construction, operation, and maintenance of the project:

- All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.
- The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.
- If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

2. The project area will be monitored on a yearly basis for the occurrence of noxious weeds and/or invasive species. All such species which occur will be eradicated using materials and methods approved in advance by the authorized officer.
3. The proposed storage tank should not be placed any further south and/or west than the northwest quarter of section 16, T3S R98W.
4. Further livestock use incentives any further south and/or west than the northwest quarter of section 16, T3S R98W (e.g., additional waters, location of salt) would be evaluated in the context of sage-grouse nest and brood habitat and may be adjusted with the objective of not adding to reductions in ground cover height and/or density as residual or current year's growth. These future evaluations would be predicated on best available information (e.g., RMP land use prescriptions for grouse nest and brood ranges) or newly developed and accepted habitat thresholds.
5. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.
6. For phase II, The BLM will obtain a general phase II permit with the EPA and have its CDPHE approved Stormwater Pollution Prevention Plan (SWPPP) on file at the WRFO.
7. It is recommended that an evaluation of BLM Spring 173-04 be done prior to implementation of the proposed action to assess its potential as a wildlife/livestock water source. If BLM Spring 173-04 is identified as an inadequate source of water, construction of the proposed watering tanks and pipeline will follow construction/reclamation procedures outlined in the proposed action; however if it is adequate, then additional mitigation may be required to keep livestock from over using the newly accessed area.
8. In order to maintain/improve water quality in the affected catchment areas, the burned area along the drainage divide must be deferred from all livestock grazing until successful revegetation is observed by the BLM ID team.
9. All disturbed areas will be promptly recontoured and revegetated with Native seed mix #3 listed in the table below.

| Native Seed Mix # 3 |                                 |   |   |
|---------------------|---------------------------------|---|---|
| 3                   | Western wheatgrass (Rosanna)    | 2 | Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany) |
|                     | Bluebunch wheatgrass (Whitmar)  | 2 |   |
|                     | Thickspike wheatgrass (Critana) | 1 |   |
|                     | Indian ricegrass (Rimrock)      | 2 |   |
|                     | Fourwing saltbush (Wytana)      | 1 |   |
|                     | Utah sweetvetch                 | 1 |   |

10. In the interest of sage-grouse habitat restoration, it is recommended that these waters be made unavailable to big game prior to and after the livestock use period.
11. Pipelines and water storage tanks should be inspected regularly for leaks to mitigate unnecessary water depletion from alluvium.

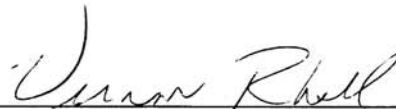
12. The Colorado-One-Call procedure will have to be initiated before any surface disturbance can take place in order to locate any known and unknown buried facilities.
13. The water pipeline will be posted with signs that are intervisible to each other. The markers for water pipelines are generally blue and white in color.
14. The storage tanks will be signed with an emergency contact and telephone number of who to contact.
15. The Permittee shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods.
16. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
17. Remove as little vegetation as possible during construction.

**COMPLIANCE/MONITORING:** Black Sulphur allotment rangeland monitoring studies.

**NAME OF PREPARER:** Mark Hafkenschiel, Rangeland Management Specialist 5/11/06

**NAME OF ENVIRONMENTAL COORDINATOR:** Caroline Hollowed

**SIGNATURE OF AUTHORIZED OFFICIAL:**



Field Manager

**DATE SIGNED:**

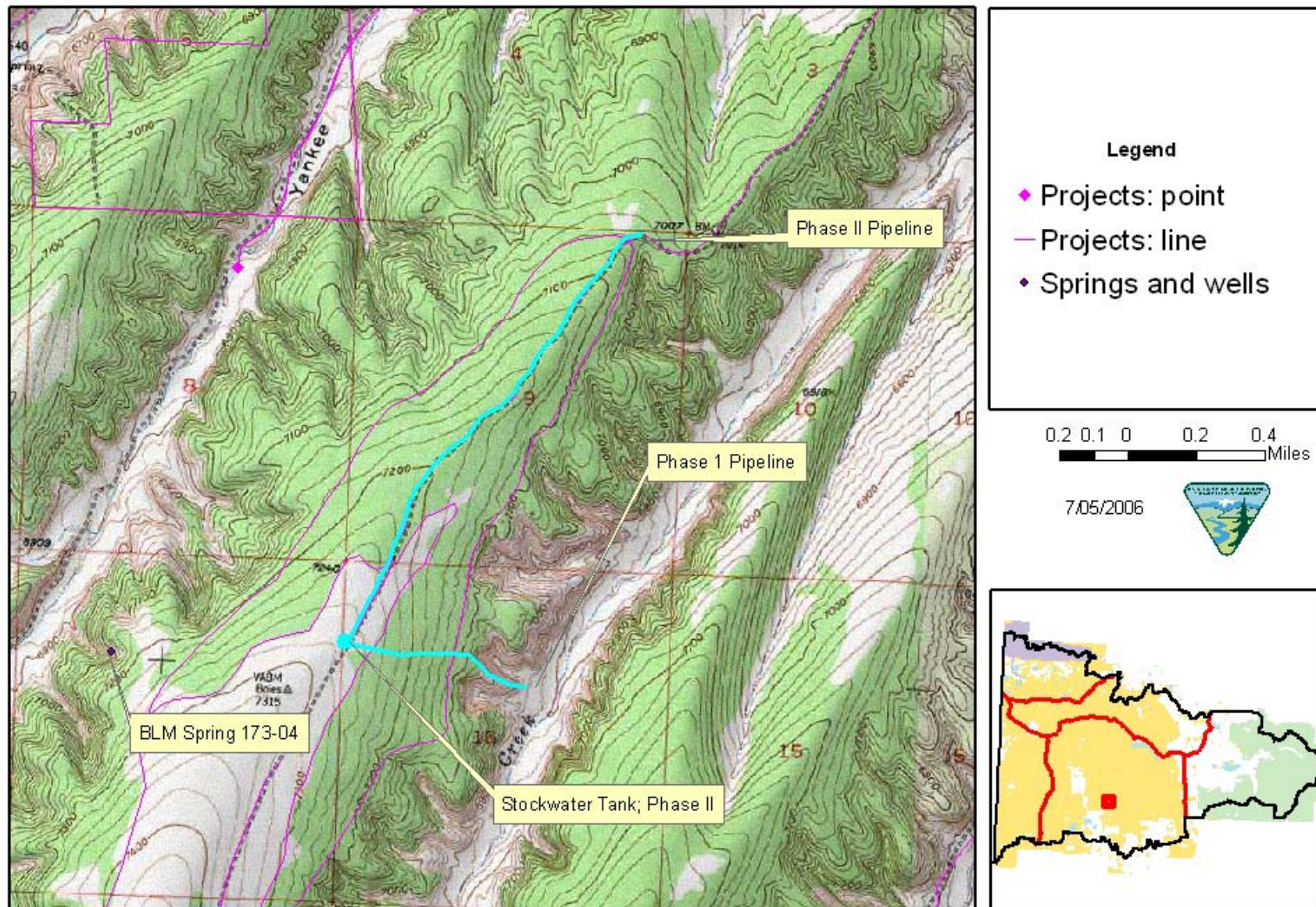
7/5/06

**ATTACHMENTS:** Figure 1; Project Proposal  
General location map of the proposed action



Figure 1:

CO-110-2006-139-EA - Eureka Pipeline & Storage





## Location Map of the Proposed Action CO-110-2006-139-EA

